AMENDMENTS

In the Claims:

1. (Currently Amended) A semiconductor laser device having an oscillation wavelength of larger than 760 nm and smaller than 800 nm in which at least a lower clad layer, a lower guide layer, an active region, an upper guide layer and an upper clad layer are supported by a GaAs substrate, the active region having a quantum well structure in which one or more well layers and barrier layers are stacked, wherein

said one or more well layers are formed of InGaAsP and said barrier layers are formed of InGaAsP, the barrier layers having a band gap energy larger than that of said one or more well layers,

said upper and/or lower guide layer is formed of $Al_zGa_{1-z}As$ ($0.20<z\leq1$),

said one or more well layers are compressive strained and said barrier layers are tensile strained,

each of the $Al_zGa_{1-z}As$ upper and/or lower guide layers interfaces with an adjacent tensile strained barrier layer, ~~and~~

upper and lower surfaces of each of the one or more well layers interfaces with an adjacent tensile strained barrier layer,

said semiconductor laser device further comprises a GaAs etching stop layer, and

said upper clad layer comprises an AlGaAs first upper clad layer and an AlGaAs second upper clad layer with the GaAs etching stop layer therebetween, said AlGaAs second upper clad layer defining a ridge stripe.

2. (Original) The semiconductor laser device according to Claim 1, wherein

a value of z representing a mole fraction of Al in the group-III elements of said upper and/or lower guide layer is larger than 0.25.

3. (Previously Presented) The semiconductor laser device according to Claim 1, wherein

said upper and lower clad layers contain Al, and

a value of z, where a value of z represents a mole fraction of Al in the group-III elements of said upper and/or lower guide layer, is smaller than a value of an Al mole fraction of said upper and lower clad layers.

4. (Original) The semiconductor laser device according to Claim 3, wherein

the value of z varies stepwise or continuously and in such a fashion as to increase with increasing nearness to said upper and lower clad layers.

5. (Previously Presented) The semiconductor laser device according to Claim 1, wherein

a value of z, where a value of z represents a mole fraction of Al in the group-III elements of said upper and/or lower guide layer, of at least a portion in contact with a barrier layer of said upper and/or lower guide layer is smaller than 0.4.

6-7. (Cancelled).

8. (Original) An optical disk unit in which the semiconductor laser device as defined in Claim 1 is used as a light-emitting device.

9. (Original) A semiconductor laser device having an oscillation wavelength of larger than 760 nm and smaller than 800 nm in which at least a lower clad layer, an active region and an upper clad layer are supported by a GaAs substrate, the active region having a quantum well structure in which one or more well layers and barrier layers are stacked, wherein

said barrier layers are formed of an $In_{1-x}Ga_xAs_{1-y}P_y$ having a band gap energy larger than that of said well layers, and

there hold relationships that

$0 < x \leq 1$,

$0.2 < y < 0.75$, and

$|(a2-a1)/a1| \times 100 > 0.65$,

where a1 is a lattice constant of said one or more well layers, and a2 is a lattice constant of said barrier layers.

10. (Original) The semiconductor laser device according to Claim 9, wherein given that a lattice constant of the GaAs substrate is a0, a value of (a1-a0)/a0 is a positive value.

11. (Original) The semiconductor laser device according to Claim 9, wherein no Al element is contained in said one or more well layers.

12. (Original) The semiconductor laser device according to Claim 11, wherein said one or more well layers are formed of InGaAsP.

13. (Original) The semiconductor laser device according to Claim 9, wherein any or every one of said barrier layers is in contact with an AlGaAs layer at a surface of the barrier layer opposite from a well layer.

14. (Original) The semiconductor laser device according to Claim 13, wherein the barrier layer in contact with the AlGaAs layer is an outermost layer in said active region.

15. (Original) The semiconductor laser device according to Claim 13, wherein a layer thickness of the barrier layer in contact with the AlGaAs layer is larger than 4 nm.

16. (Original) The semiconductor laser device according to Claim 9, wherein a value of x representing a mole fraction of Ga in the group-III elements of said barrier layers is smaller than 1.

17. (Original) The semiconductor laser device according to Claim 9, further comprising:

a guide layer formed of AlGaAs and placed between said active region and said upper and/or lower clad layer.

18. (Original) The semiconductor laser device according to Claim 9, wherein said upper and/or lower clad layer is formed of AlGaAs.

19. (Original) The semiconductor laser device according to Claim 9, further comprising:

a guide layer formed of InGaP or InGaAsP and placed between said active region and said upper and/or lower clad layer, wherein

said upper and/or lower clad layer is formed of AlGaInP or InGaP.

20. (Original) The semiconductor laser device according to Claim 9, wherein a value of y representing a mole fraction of P in the group-V elements of said barrier layers is larger than 0.25.

21. (Original) The semiconductor laser device according to Claim 9, wherein a value of y representing a mole fraction of P in the group-V elements of said barrier layers is smaller than 0.6.

22. (Original) An optical disk unit in which the semiconductor laser device as defined in Claim 9 is used as a light-emitting device.

23. (Cancelled).

24. (New) The semiconductor laser device according to Claim 1, further comprising:

a GaAs protective layer on top of the AlGaAs second upper clad layer;

a current block layer provided along the GaAs etching stop layer on opposite sides of the AlGaAs second upper clad layer and along each of opposite side surfaces of the AlGaAs second upper clad layer and the GaAs protective layer so as to sandwich the AlGaAs second upper clad layer and the GaAs protective layer therebetween;

a GaAs buried protective layer provided on the opposite sides of the GaAs protective layer, with a part of the current block layer disposed between the GaAs protective layer and the GaAs buried protective layer, and with top surfaces of the GaAs protective layer, the GaAs buried protective layer, and the part of the current block layer being flush with each other; and

a GaAs cap layer provided on the top surfaces of the GaAs protective layer, the part of the current block layer, and the GaAs buried protective layer.

25. (New) The semiconductor laser device according to Claim 24, wherein the current block layer comprises an AlGaAs first current block layer and a GaAs second current block layer laid on the AlGaAs first current block layer.

26. (New) A semiconductor laser device having an oscillation wavelength of larger than 760 nm and smaller than 800 nm in which at least a lower clad layer, a lower guide layer, an active

region, an upper guide layer and an upper clad layer are supported by a GaAs substrate, the active region having a quantum well structure in which one or more well layers and barrier layers are stacked, wherein

said one or more well layers are formed of InGaAsP and said barrier layers are formed of InGaAsP, the barrier layers having a band gap energy larger than that of said one or more well layers,

said upper and/or lower guide layer comprises $Al_zGa_{1-z}As$ ($0.20<z\leq1$),

a conduction-energy band difference $|\Delta Ec|$ between said upper and/or lower guide layer and said one or more well layers is greater than or equal to 0.2 eV,

said one or more well layers are compressive strained and said barrier layers are tensile strained,

each of the $Al_zGa_{1-z}As$ upper and/or lower guide layers interfaces with an adjacent tensile strained barrier layer, and

upper and lower surfaces of each of the one or more well layers interfaces with an adjacent tensile strained barrier layer.